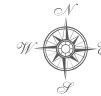
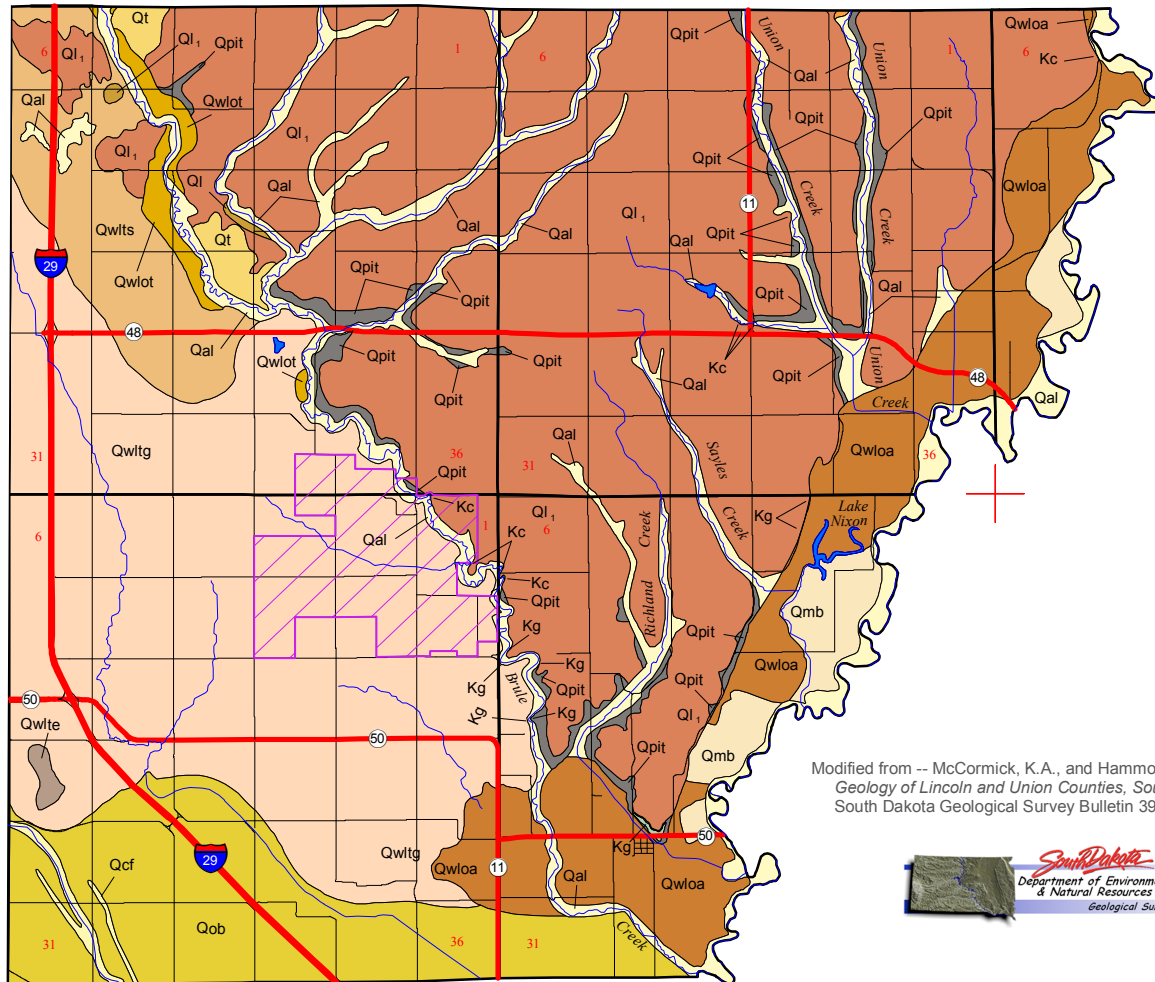


R. 50 W.

R. 49 W.

R. 48 W.

# Map of surface geology in the area of the proposed Hyperion Energy Center

T. 93  
N.T. 93  
N.T. 92  
N.

Modified from -- McCormick, K.A., and Hammond, R.H., 2004,  
Geology of Lincoln and Union Counties, South Dakota:  
South Dakota Geological Survey Bulletin 39.



Digital Cartography by B.A. Fagnan and M.T. Noonan

R. 50 W.

R. 49 W.

Qal

**Alluvium** - Stream deposits of silt and clay with minor amounts of sand and gravel.

Qob

**Overbank** - Flood deposits of mainly clay and silt with minor sand.

Qmb

**Meander Bar** - Abandoned river channels and bars consisting of mainly clay and silt in the channels and sand and gravel in the bars.

Qcf

**Channel Fill** - Clay and minor silt and sand filling an abandoned river channel.

Ql

**Loess** - Eolian deposits of mainly silt-sized grains; forms relatively steep slopes; calcareous; gray, weathering to yellow or red.

Ql1

**Loess** - Eolian deposits of mainly silt-sized grains; forms relatively steep slopes; calcareous; gray, weathering to yellow or red; overlying pre-Illinoian till.

Qt

**Terrace** - Mainly clay forming a flat to gently sloping surface adjacent to streams; likely an erosional surface formed on till.

Qwloa

**Outwash and Alluvium** - Sand and gravel of glaciofluvial origin with minor alluvial overburden; confined to a valley.



**Area rezoned for the proposed  
Hyperion Energy Center**

Qwlot

**Outwash Terrace** - Sand and gravel of glaciofluvial origin; confined to a valley; sloping to a relatively flat surface.

Qwltg

**Till, Ground Moraine** - Heterogeneous mixture of boulders, pebbles, sand, silt, and clay; flat to gently undulating topography.

Qwits

**Till, Stagnation Moraine** - Heterogeneous mixture of boulders, pebbles, sand, silt, and clay; undulating to hummocky topography characterized by poorly-developed drainages with numerous lakes and sloughs.

Qwite

**Till, End Moraine** - Heterogeneous mixture of boulders, pebbles, sand, silt, and clay; relatively elevated topography.

Qo

**Sand and Gravel** - Sand and gravel with minor silt and clay of unknown age.

Qpit

**Till** - Heterogeneous mixture of boulders, pebbles, sand, silt, and clay; typically occurs at higher elevation than late Wisconsin till; topography is characterized by well-developed drainages.

Kc

**Carlile Shale** - A greasy, dark-gray, concretionary shale; the lower part can be calcareous with numerous thin, silty beds; the upper part is non calcareous and organic-rich with occasional thin sandstone and siltstone lenses.

Kg

**Greenhorn Limestone** - Interbedded gray, silty, calcareous shale, calcarenite, and hard skeletal limestone.